

COMMERCIAL STANDARD CS241-61

Aluminum Tension Window Screens

A recorded
voluntary standard of the
trade published by
the U.S. Department
of Commerce



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U.S. DEPARTMENT OF COMMERCE
BUSINESS AND DEFENSE SERVICES ADMINISTRATION
OFFICE OF TECHNICAL SERVICES
Commodity Standards Division

With the cooperation of the
National Bureau of Standards

EFFECTIVE DATE

Having been passed through the regular procedures of the Commodity Standards Division, and approved by the acceptors hereinafter listed, this Commercial Standard is issued by the U.S. Department of Commerce, effective November 10, 1961.

LUTHER H. HODGES, *Secretary.*

COMMERCIAL STANDARDS

Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of the Office of Technical Services, Business and Defense Services Administration, and with the National Bureau of Standards. Their purpose is to establish quality criteria, standard methods of test, rating, certification, and labeling of manufactured commodities, and to provide uniform bases for fair competition.

The adoption and use of a Commercial Standard is voluntary. However, when reference to a Commercial Standard is made in contracts, labels, invoices, or advertising literature, the provisions of the standard are enforceable through usual legal channels as a part of the sales contract.

Commercial Standards originate with the proponent industry. The sponsors may be manufacturers, distributors, or users of the specific product. One of these three elements of industry submits to the Commodity Standards Division the necessary data to be used as the basis for developing a standard of practice. The division by means of assembled conferences or letter referenda, or both, assists the sponsor group in arriving at a tentative standard of practice and thereafter refers it to the other elements of the same industry for approval or for constructive criticism that will be helpful in making any necessary adjustments. The regular procedure of the division assures continuous servicing of each Commercial Standard through review and revision whenever, in the opinion of the industry, changing conditions warrant such action.

SIMPLIFIED PRACTICE RECOMMENDATIONS

Under a similar procedure the Commodity Standards Division cooperates with industries in the establishment of Simplified Practice Recommendations. Their purpose is to eliminate avoidable waste through the establishment of standards of practice for sizes, dimensions, varieties, or other characteristics of specific products; to simplify packaging practices; and to establish simplified methods of performing specific tasks.

Aluminum Tension Window Screens

(Effective November 10, 1961)

1. PURPOSE

1.1 The purpose of this Commercial Standard is to provide a nationally recognized standard of quality for aluminum tension window screens as generally desired by the trade. It is also intended to serve as a basis for fair marketing practices; to promote a better understanding between manufacturers, distributors, and users; and to assist ultimate customers in determining the sizes and types of these screens which are considered standard by the industry.

2. SCOPE

2.1 This standard covers materials, finish, construction, size variance, packaging and labeling for commercial standard aluminum tension window screens, intended for installation on any dwelling, building or structure, for the purpose of preventing the ingress of flies, mosquitoes, or other insects. This standard does not cover other types of window screens used for this purpose, such as roller screens, extruded frame, steel frame, bronze frame, wood frame, aluminum tubular frame and galvanized steel tension screens. A recommended means for declaring compliance with the Standard is also included.

3. DEFINITION AND NOMENCLATURE

3.1 Definition.—An aluminum tension window screen is a manufactured product consisting essentially of a single piece of insect screening (see paragraph 4.2.2) with reinforced vertical edges, held taut against the blind stop or the casing of the window by means of metal top and bottom tension bars (rails). The tension bars are secured at the head and sill of the window frame and provide positive interlock for folded ends of the screening so that it will withstand the tension to which it is subjected.

3.2 Nomenclature.—(See Figure 1)

4. REQUIREMENTS

4.1 Workmanship.—Aluminum tension window screens shall be reasonably free from dents, scratches, excessive roll marks, oil, stains, dirt, paint blotches or blemishes, or any defects that might affect their serviceability or appearance.

4.2 Materials.

4.2.1 Top and Bottom Bars.

4.2.1.1 Alloy, Gauge and Finish.—In order to maintain a high degree of corrosive resistance, top and bottom tension bars shall be roll formed from any of the following commercially produced aluminum alloys: 3003, 5005, 5050, 5052, 5056, provided that composition, mechanical properties and tolerances conform to ASTM Specification

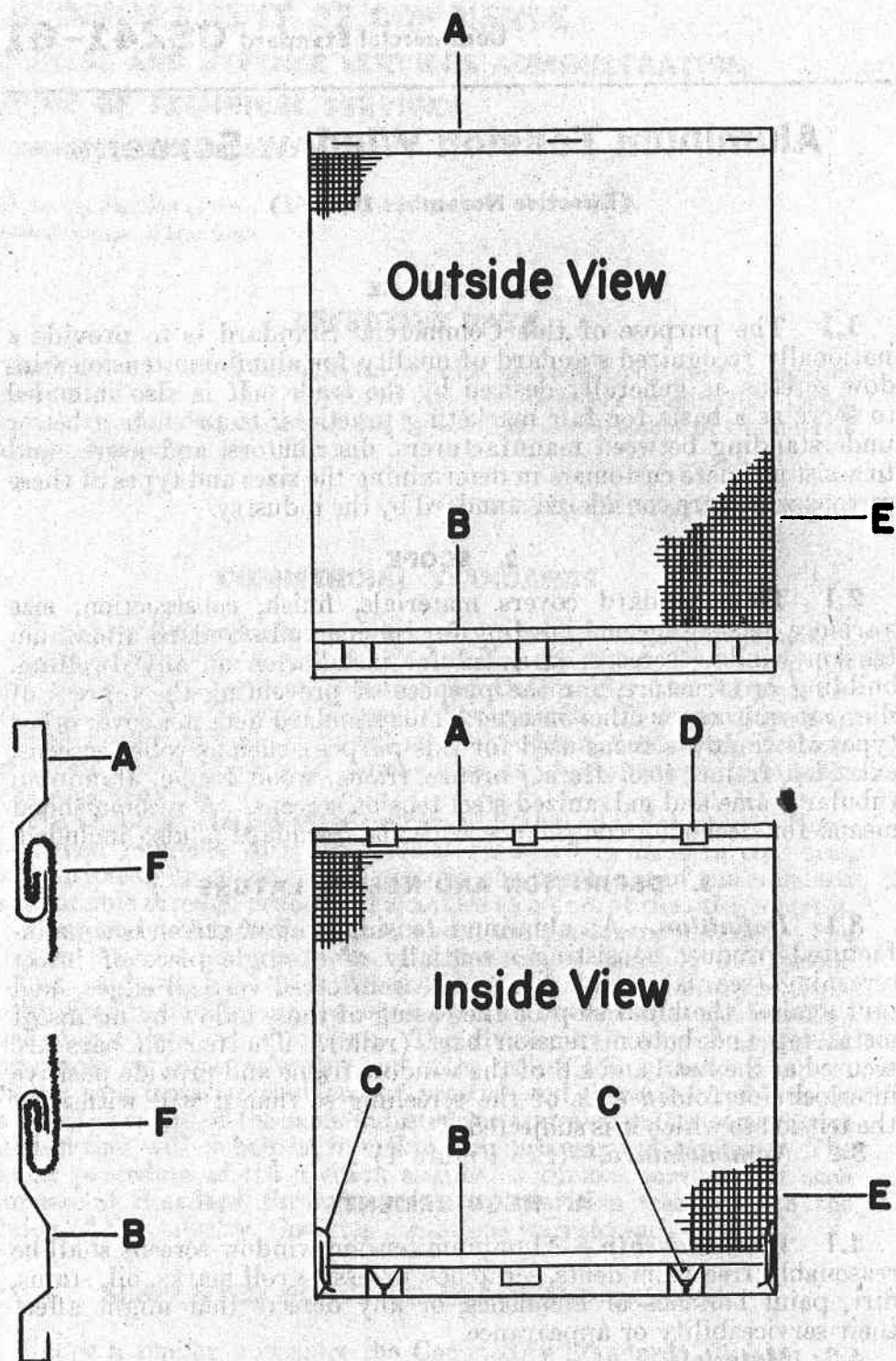


Figure 1. Diagram of Component Parts of An Aluminum Tension Window Screen

- | | |
|---|---|
| A—Top Bar | E—Insect Screening |
| B—Bottom Bar | F—Positive Interlock Provided Between Screen Cloth and Top and Bottom Bars |
| C—Bottom Fasteners (Bottom Fasteners May Be Sill or Side Type) | |
| D—Top Fasteners | |

B209-57T, Aluminum-Alloy Sheet and Plate, or later issue;¹ and minimum acceptable gauge shall be .025 (plus or minus commercial tolerance). Top and bottom tension bars shall be formed from aluminum sheet having at least a minimum quality of standard mill finish. A Certificate of Compliance furnished by the material supplier to the screen manufacturer may be accepted as sufficient evidence of conformity with these requirements.

4.2.2 Insect Screening.

4.2.2.1 Aluminum Screening.—Multi-selva aluminum insect screening shall conform to the requirements of Commercial Standard CS138-55 and Amendment, effective October 1, 1956, or later edition.²

4.2.2.2 Fibrous-glass Screening.—Multi-selva fibrous-glass insect screening shall conform to the requirements of Federal Specification L-S-137, or later edition.³

4.2.2.3 A Certificate of Compliance furnished by the screening supplier to the screen manufacturer may be accepted as sufficient evidence of conformity with these requirements.

4.2.3 Hardware.—Screen hardware shall be made of aluminum, stainless steel, cadmium-plated steel, or suitable plastic materials.

4.3 Design and Construction.

4.3.1 Tension Bar Hardware.—Top (head) tension bar hardware shall consist of suitable fasteners, locks, or clips properly spaced; bottom (sill) tension bar hardware shall consist of suitable clips, locks or fasteners for locking screen in position and exerting optimum tension evenly on screening. The design and function of the screen hardware shall be such as to assist the ultimate user with a practical application, free of any defects that might affect the serviceability of the screen. Hardware shall be of such design as to allow the screen to be easily installed and removed from the inside of the building.

4.3.2 Method of Fastening Screening to Top and Bottom Bars (Rails).—Insect screening shall be folded at top and bottom with double folds to provide positive interlock with top and bottom bars (rails). Top and bottom bars (rails) shall be readily removable for replacement of screen cloth if necessary.

4.3.3 Stretch.—Length of screening shall be such as to be sufficiently taut and free from sagging or bulged appearance when the screen is installed on the window.

4.3.4 Weave Alignment.—Horizontal strands of insect screening shall parallel top and bottom bars and at no time exceed eight (8) strands out of parallel alignment.

4.3.5 Vertical Screening Edges.

4.3.5.1 Standard Widths.—On standard widths vertical edges of screening shall consist of a selva edge having sufficient added strength to provide the necessary reinforced edges.

4.3.5.2 Special Widths.—All widths other than standard stock sizes are specials. On special widths, where necessary, one vertical edge may be cut and folded to provide necessary vertical edge strength and to eliminate exposed cut edge.

4.3.6 Adjustments.—Tension screens shall provide an adjustment feature in the top or bottom bar for height variation and to insure a snug fit at all points.

¹ Obtainable at American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pennsylvania.

² Obtainable at Government Printing Office at 10 cents per copy.

³ Obtainable at Business Service Center, General Services Administration, Region 3, Washington 25, D.C., at 10 cents per copy.

4.4 Application.—When commercial standard aluminum tension window screens are applied to a window blind stop or casing, the insect screening shall fit snugly against the blind stop or casing and shall hang flat without sagging or bulging of the wire.

4.5 Standard Stock Sizes.

4.5.1 Standard stock sizes for use on wood double-hung windows are determined from the standard opening sizes established by the woodwork industry in accordance with the following:

Width of screen The width of the standard sash opening minus $\frac{1}{4}$ inch.

Height (length) of screen The height of the standard sash opening with an allowance for proper tension including an adjustment tolerance of plus or minus $\frac{1}{4}$ inch.

4.5.2 Size Tolerance.—In any designated standard stock size the width tolerance shall be maintained within plus or minus $\frac{1}{16}$ inch and the height tolerance shall be maintained within proper dimensions to provide consistent tight fit of the screen on the window, dependent on the adjustment features of the individual screen.

4.6 Special sizes, made to order, shall conform with all applicable requirements of this Commercial Standard. (See paragraph 4.3.5.2).

5. PACKAGING

5.1 Unless otherwise specified by the purchaser, standard aluminum tension screens shall be rolled cylindrically and secured so that each screen can be removed from the shipping carton individually for rehandling or re-shipment by the customer. Tension screens shall be packaged in corrugated board containers of at least 175 pound test board.

6. LABELING

6.1 Individual screens shall be clearly marked as to size and type. Each screen carton shall be clearly marked as to the number of tension screens in each carton, the size and the type of screening material. All shipping cartons should also be plainly marked "FRAGILE".

7. IDENTIFICATION

7.1 In order to assure the purchaser that he is receiving aluminum tension screens complying with the requirements of this Standard, it is recommended that the label on each carton carry the following identification:

These tension screens comply with all requirements of Commercial Standard CS241-61, as developed by the trade under the procedure of the Commodity Standards Division, and issued by the United States Department of Commerce.

(Name of manufacturer)

HISTORY OF PROJECT

This project was initiated on October 8, 1957, by a request from the Screen Manufacturers Association for assistance in developing a Commercial Standard for aluminum frameless tension window screens. A tentative draft of a proposed standard, which had been prepared

by the Association's Technical Committee and approved by members of the Screen Manufacturers Association was submitted at that time to the Commodity Standards Division as a basis for developing a Commercial Standard.

On October 30, 1957, the Proposed Commercial Standard (TS-5370) was circulated to a representative cross-section of manufacturers, distributors, users, governmental agencies and other interested organizations for comment. Comments received by the Division were reviewed by the Technical Committee and adjustments were made in the proposal.

The Recommended Commercial Standard (TS-5436) was circulated on January 20, 1959, to all segments of the industry for consideration and acceptance. Following acceptance by a favorable majority of the production volume and a representative cross-section of other segments of the industry, an announcement of the success of the project was issued on October 10, 1961. The Commercial Standard, Aluminum Tension Window Screens, CS241-61, was made effective November 10, 1961.

Project Manager: H. A. Bonnet, Commodity Standards Division, OTS
Technical Adviser: George A. Ellinger, Corrosion Section, Metallurgy Division,
National Bureau of Standards

STANDING COMMITTEE

The function of the standing committee is to review, prior to circulation for acceptance, changes proposed to keep the standard abreast of progress. Comments concerning the standard and suggestions for revision may be addressed to the Commodity Standards Division, Office of Technical Services, U.S. Department of Commerce, which acts as secretary for the committee, or to any of its members listed below:

At the time of publication of the printed edition of CS241-61 the industry had not completed recruiting the membership of the Standing Committee. When completed, the names of the members will be available from the Commodity Standards Division and from the Screen Manufacturers Association. Reprints or revisions of the standard will include the membership.

ACCEPTORS

The manufacturers, distributors, users and others listed below have individually indicated in writing their acceptance of this Commercial Standard prior to its publication. The acceptances indicate an intention to utilize the standard as far as practicable, but reserve the right to depart from it as may be deemed desirable. The list is published to show the extent of recorded public support for the standard, and should not be construed as indicating that all products made by the acceptors actually comply with its requirements.

Products that meet all requirements of the standard may be identified as such by a certificate, grade mark, or label. Purchasers are encouraged to require such specific evidence of compliance, which may be given by the manufacturer whether or not he is an acceptor.

ASSOCIATIONS (General Support)

American Wood Window Institute, Division of Ponderosa Pine Woodwork, Chicago, Ill.
Carolina Lumber & Building Supply Association, Charlotte, N.C.
Home Manufacturers Association, Washington, D.C.
Screen Manufacturers Association, Chicago, Ill.
Southern Sash & Door Jobbers Association, Memphis, Tenn.

FIRMS AND OTHER INTERESTS

Addison-Rudesal, Inc., Atlanta, Ga.
American Screen Products Co., Chatsworth, Ill.
Becker Manufacturing Co., Inc., Fairmont, W. Va.
Binswanger & Co., Inc., Richmond, Va.
Chicopee Mills, Inc., Lumite Division, New York, N.Y.
Colorado Fuel & Iron Corp., The, Wickwire Spencer Steel Division, Philadelphia, Pa.
Columbia Mills, Inc., The, Los Angeles, Calif.
Columbia Mills, Inc., The, Syracuse, N.Y.
Crestline Home Building Co., Inc., Shawnee, Okla.
Dodge Wire Corp., Atlanta, Ga.
Durall Products Co., Rockville, Md.
Fabrow Manufacturing, Inc., Toledo, Ohio.
Hallack & Howard Lumber Co., The, Denver, Colo.
Huttig Sash & Door Co., Knoxville, Tenn.
Independent Screen Co., Oklahoma City, Okla.
Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Keystone-Seneca Wire Cloth Co., Fostoria, Ohio.

Loxscreen Co., Inc., The, Columbia, S.C.

Malta Manufacturing Co., The, Malta, Ohio.
Morgan Company, Oshkosh, Wis.

National Academy of Sciences, Washington, D.C. (General Support).
New York Wire Cloth Co., York, Pa.
Northern Sash & Door Co., Hawkins, Wis.

Revere Copper and Brass Inc., New York, N.Y. (General Support).
Reynolds Metals Co., Richmond, Va. (General Support).
Rudiger-Lang Co., New Orleans, La.

Sash, Door & Glass Corp., Richmond, Va.
Sears, Roebuck and Co., Chicago, Ill.
Southeastern Tool & Die Co., Inc., Birmingham, Ala.
Southern Sash & Door Co., Greenville, S.C.

Uni-Temp Products, Inc., McPherson, Kans. (General Support).
Universal Molding Co., Lynwood, Calif. (General Support).

U.S. GOVERNMENT

Army, Dept. of, Garrison Engineering District, Riverdale, N. Dak. (General Support).
Army, Dept. of, Corps of Engineers, Charleston, S.C. (General Support).
Army, Dept. of, Corps of Engineers, Chicago, Ill. (General Support).
Federal Housing Administration, Bangor, Maine (General Support).
Navy, Dept. of, Eleventh Naval District, Public Works Office, San Diego, Calif. (General Support).
Navy, Dept. of, Thirteenth Naval District, Public Works Office, Seattle, Wash. (General Support).

OTHER COMMERCIAL STANDARDS

A list of Commercial Standards may be obtained from the Commodity Standards Division, Office of Technical Services, United States Department of Commerce, Washington 25, D.C. This list includes the purchase price of the publication and directions for ordering copies.

ACCEPTANCE OF COMMERCIAL STANDARD

CS 241-61 Aluminum Tension Window Screens

If acceptance has not previously been filed, this sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this Commercial Standard.

Date _____

Commodity Standards Division
Office of Technical Services
Business and Defense Services Administration
U. S. Department of Commerce
Washington 25, D. C.

Gentlemen:

We believe that this Commercial Standard constitutes a useful standard of practice, and we individually plan to utilize it as far as practicable in the

production¹ distribution¹ purchase¹ testing¹
of this commodity.

We reserve the right to depart from the standard as we deem advisable.

We understand, of course, that only those articles which actually comply with the standard in all respects can be identified or labeled as conforming thereto.

Signature of authorized officer _____
(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer _____

Organization _____

(Fill in exactly as it should be listed)

Street address _____

City, zone, and State _____

¹ Underscore the applicable words. Please see that separate acceptances are filed for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interest, trade associations, trade papers, etc., desiring to record their general support, the words "General support" should be added after the signature.

(Cut on this line)

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial Standards are commodity specifications voluntarily established by mutual consent of those concerned. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of Commercial Standards is to establish, for specific commodities, nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the standard, where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function, performed by the Department of Commerce in the voluntary establishment of Commercial Standards on a nationwide basis is fourfold: First, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active, valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or of the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

federal register



National Bureau of Standards COMMERCIAL STANDARD

Action on Proposed Withdrawal

In accordance with § 10.12 of the Department's "Procedures for the Development of Voluntary Product Standards" (15 CFR Part 10, as revised; 35 FR 8349 dated May 28, 1970), notice is hereby given of the withdrawal of Commercial Standard CS 241-61, "Aluminum Tension Window Screens." It has been determined that this standard is no longer used to any significant extent by the screen and window manufacturing industry. Therefore, its continued maintenance in the Department's voluntary product standards inventory would serve no useful purpose.

This action is taken in furtherance of the Department's announced intentions as set forth in the public notice appearing in the **FEDERAL REGISTER** of November 26, 1973, (38 FR 32522), to withdraw this standard.

The effective date for the withdrawal of this standard will be April 12, 1974. This withdrawal action terminates the authority to refer to this standard as a voluntary standard developed under the Department of Commerce procedures.

Dated: February 5, 1974.

RICHARD W. ROBERTS,
Director.

[FR Doc.74-3834 Filed 2-8-74;8:45 am]